WHAT IS CLAIMED IS:

1. A method for treating a mammal bearing one or more tumors, said mammal having a prolactin and a melatonin daily rhythm and in need of such treatment comprising the steps of:

comparing the prolactin profile of said tumor bearing mammal to a normal prolactin profile for healthy mammals of the same species and sex;

adjusting the prolactin profile of the mammal by administering prolactin enhancers or reducers in order that said prolactin profile conforms to or approaches the normal prolactin profile for healthy members of the same species and sex of said mammal;

contacting the cells of said tumor with a photosensitizer; and

exposing said contacted tumor cells to light of a predetermined wavelength and power density and energy level.

2. The method of claim 1 wherein said comparing step further comprises measuring the blood prolactin level of said tumor bearing mammal at spaced apart intervals within a 24-hour period to generate a prolactin profile for said mammal.

3. The method of claim 2 wherein said comparing step reveals that said tumor bearing mammal has (i) blood prolactin levels lower than 1 standard error of the mean (SEM) below the normal night time prolactin level at two spaced apart time intervals or (ii) a blood prolactin level lower than 2 SEM below the normal night time prolactin level at one time point; and

said adjusting step comprises administering to said tumor bearing mammal a prolactin enhancer at a predetermined time or times to increase the night time prolactin levels of said mammal so that said mammal's night time prolactin level conforms to or approaches the normal night time prolactin profile.

4. The method of claim 3 wherein said prolactin enhancer is a member selected from the group consisting of melatonin, metoclopramide, domperidone and 5-hydroxytryptophan.

5. The method of claim 3 wherein said tumor bearing mammal is a human.

6. The method of claim 5 wherein said prolactin enhancer is melatonin and said melatonin is administered in amount within the range of 0.5-20 mg/person/day.

7. The method of claim 1 wherein said adjustment is continued until the prolactin rhythm of said mammal is reset to conform to or approach the normal prolactin profile and continues in its reset condition after cessation of said adjustment.

8. The method of claim 2 wherein said adjusting step comprises administering to said tumor bearing mammal a prolactin reducer at a predetermined time or times to decrease the day time prolactin levels of said mammal so that said mammal's day time prolactin level conforms to or approaches the normal night time prolactin profile.

9. The method of claim 8 wherein said mammal is a human, said prolactin reducer is bromocriptine, said bromocriptine is administered in an amount within the range of 0.2 to 8.0 mg/person/day, and said predetermined time is between about 6:00h and 10:00h.

10. The method of claim 9 wherein said bromocriptine is administered in an amount within the range of 0.8 to 4.8 mg/person/day.

11. The method of claim 10 wherein said bromocriptine amount is within the range of 0.8 - 3.2 mg/person/day.

12. The method of claim 6 wherein said predetermined time is about bedtime.

13. The method of claim 1 wherein said photosensitizer:

is positively charged;

is sufficiently lipophilic to be taken up by said tumor;

is retained substantially longer in the cells of said tumor than in non-tumor cells;

has a high absorption coefficient in the 600-900 nm light spectral region;

is capable of sensitizing tumor cells to killing by light exposure; and

is administered in an effective amount to sensitize said tumor to light.

14. The method of claim 13 wherein said photosensitizer is selected from the group consisting of porphyrin dyes, phthalocyanine dyes, cyanine dyes, benzophenoxazine analogs, and pharmaceutically acceptable salts thereof.

15. The method of claim 13 wherein said prolactin reducer or enhancer is administered orally, by injection, transdermally, or intranasally.

16. The method of claim 13 wherein said photosensitizer is administered intravenously, intraperitoneally, subcutaneously, or intralesionally.

17. The method of claim 16 wherein said effective amount of said photosensitizer is between about 0.1 and 15 mg/kg of body weight.

18. The method of claim 16 wherein said effective amount is between about 0.5 and 10 mg/kg of body weight.

19. The method of claim 18 wherein:

the energy level of said light is between about 5 and 400 Joules/cm^2;

the power density of said light is between about 50 and 200 mWatts/cm^2;

said tumor cells are exposed to said light between about 0.5 and 8 hours after administration of said photosensitizer.

20. The method of claim 16 wherein said effective amount is about 5.0 mg/kg of body weight.

21. The method of claim 19 wherein:

the energy level of said light is about 100 Joules/cm^2;

the power density of said light is about 50 mWatts/cm^2;

said tumor cells are exposed to said light at about 1 hour after administration of said photosensitizer.

22. The method of claim 19 wherein said photosensitizer is a benzophenothiazine.

23. The method of claim 21 wherein said photosensitizer is a benzophenothiazine.

24. The method of claim 22 wherein said benzophenothiazine is a member selected from the group consisting of Dye 4-115 and 5-ethylamino-9-diethylamino-benzo[a]phenothiazinium chloride.

25. The method of claim 23 wherein said benzophenothiazine is a member selected from the group consisting of Dye 4-115 and 5-ethylamino-9-diethylamino-benzo[a]phenothiazinium chloride.

26. The method of claim 13 wherein said contacting and exposing steps occur between about 7 and 14 days after initiation of said adjusting step.

27. The method of claim 15 wherein:

said mammal is a human;

said prolactin reducer is bromocriptine;and

said prolactin enhancer is selected from the group consisting of prolactin, melatonin, metoclopramide, domperidone, and 5-hydroxytryptophan.

28. The method of claim 27 wherein said prolactin enhancer is selected from the group consisting of prolactin and melatonin.

29. The method of claim 27 wherein said bromocriptine is administered at a time between about 6:00h and 10:00h and in an amount between about 0.8 and 8.0 mg/person/day.

30. The method of claim 28 wherein said prolactin enhancer is melatonin and wherein said melatonin is administered at about bedtime and in an amount between about 0.5 and 20 mg/person/day.

31. The method of claim 29 wherein:

the energy level of said light is about 100 Joules/cm^2;

the power density of said light is about 50 mWatts/cm^2;

said tumor cells are exposed to said light at between about 1 and about 3 hours after administration of said photosensitizer;

said photosensitizer is a member selected from the group consisting of Dye 4-115 and 5-ethylamino-9-diethylamino-benzo[a]phenothiazinium chloride; and

said photosensitizer is administered in an amount between about 1 and 5 mg/kg of body weight.

32. The method of claim 30 wherein:

the energy level of said light is about 100 Joules/cm^2;

the power density of said light is about 50 mWatts/cm^2;

said tumor cells are exposed to said light at between about 1 and about 3 hours after administration of said photosensitizer;

said photosensitizer is a member selected from the group consisting of Dye 4-115 and 5-ethylamino-9-diethylamino-benzo[a]phenothiazinium chloride; and

said photosensitizer is administered in an amount between about 1 and 5 mg/kg of body weight.

33. A method for treating a mammal bearing one or more tumors, said mammal having prolactin and melatonin daily rhythms and in need of such treatment comprising the steps of:

adjusting the prolactin and melatonin profiles of the mammal by administering prolactin enhancers or reducers and melatonin in order that said prolactin and

melatonin profiles conform to or approach the corresponding normal profiles for healthy members of the same species and sex of said mammal;

contacting the cells of said tumor with a photosensitizer; and

exposing said contacted tumor cells to light of a predetermined wavelength and power density and energy level.

ADD B'

ADD D2